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**The Relation of Adult Attachment Security to Changes in Maternal Parenting
Behaviors: A Parenting Intervention Study**

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by

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Thesis

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Abstract

The Relation of Adult Attachment Security to Changes in Maternal Parenting Behaviors: A Parenting Intervention Study

by

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The goal of the current study was to examine the impact of mothers' attachment classification on their ability to change their parenting beliefs and behaviors over the course of a parenting intervention program. Results indicated that in large part, this study did not support the idea that secure mothers would benefit more from a parenting intervention program than insecure mothers. However, treatment group placement was found to moderate the extent to which attachment security and time interact on level of permissiveness. Specifically, insecure mothers in the seminar plus hands-on condition significantly decreased in their permissiveness over time. Thus, insecure individuals benefit from parenting intervention programs when they have the opportunity to practice as well as learn the material presented to them.

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Introduction

The use of corporal punishment is a widespread practice. In fact, 94% of parents spank their children (Gershoff, 2002), even though research has demonstrated its long-term negative effects on parents' relationships with their children (Crockenberg, 1987; Gershoff, 2002) as well as an increase in aggression during childhood (Deater-Deckard, Dodge, Bates, & Pettit, 1999) and depression, delinquent, criminal and antisocial behavior during adolescence (McCord, 1979; Holmes & Robins, 1987; Straus & Mouradian, 1998). Consequently, parenting intervention programs have been developed to provide parents with the knowledge and strategies needed to enhance the quality of care they provide their children. Most parenting programs involve parents attending classes to improve mothers' knowledge of positive alternatives to harsh discipline (Saunders, 2009), to help improve parent-child relationships (Marvin, Cooper, Hoffman, & Powell, 2002; Brotman, Dawson-McClure, Gouley, McGuire, Burraston, & Bank, 2005; Smith, 1997), and to help improve children's behavior (McIntyre, 2008; Drugli & Larsson, 2006). A recent study in which mother-child interactions were observed before and after an intervention revealed that mothers who learn new parenting techniques are more likely to use these techniques when they are able to practice them in their interactions with their children, compared with those mothers who only attended parenting classes (Saunders, 2009). Nevertheless, in both groups, some mothers changed more than others. The present study drew on attachment theory to examine why some mothers were able to change their parenting beliefs and behaviors whereas others did not.

Attachment theorists suggest that mothers' beliefs about parenting are influenced

by memories of their relationships with their own parents during childhood; these memories influence responsiveness, and therefore the quality of care they provide their children, which in turn influences infant attachment security. Many studies have shown that mothers' security of attachment, as assessed by the Adult Attachment Interview (George, Kaplan & Main, 1984, 1985, 1996), predicts the quality of their infants' attachment relationships even before their children are born (Benoit & Parker, 1994; Ward & Carlson, 1995; Fonagy, Steele & Steele, 1991). However, the quality of care mediating the link between parents and their infants' and toddlers' attachment security is not clear. In a meta-analysis involving 661 dyads, van IJzendoorn (1995) found that maternal sensitivity mediates only 23% of the direct association between parental attachment representations and the attachment relationship of their children. Hence, another goal of this study is to examine the caregiving behaviors of secure and insecure mothers, as well as the processes underlying associations between adult attachment and caregiving.

Finally, this study will be one of the first to examine whether mothers' attachment security is associated with their ability to change parenting beliefs and behaviors during their children's preschool years. To investigate this link, the research team will use data from the Parent Training in Positive Guidance (PTPG) study, a hands-on parent training intervention program designed at The University of Texas at Austin in 2007 by Dr. Deborah Jacobvitz, Dr. Nancy Hazen, and Dr. Rachel Saunders in the Department of Human Development and Family Sciences. While the PTPG study demonstrated that some people are able to change their attitudes and discipline practices based on their

placement groups (seminar-only vs. seminar plus hands-on conditions) (Saunders, 2009), the present study will build on this finding to investigate further why some mothers changed more than others above and beyond their group placement.

First, the literature relating to corporal punishment and children's developmental outcomes will be discussed. Then, parent intervention programs, specifically the PTPG study, will be discussed as an alternative to harsh or permissive discipline. The caregiving beliefs and behaviors central to the PTPG program will also be outlined. Next, mothers' attachment classifications will be discussed in the context of the caregiving behaviors they provide for their children. The expected relationship between adult attachment and adults' caregiving strategies, independent of undergoing an intervention program, will be addressed. Finally, the relationship between adult attachment and mothers' ability to incorporate new knowledge and behavioral strategies into their caregiving will be discussed. Specifically, how mothers' adult attachment security is expected to be related to their knowledge of positive guidance, as well as their behavioral use of positive guidance, empathy, and permissiveness, will be explored.

Caregiving practices and children's developmental outcomes

Corporal punishment has been the most common strategy used historically by parents to discipline their misbehaving children. Therefore, most parents use spanking for its one positive benefit – to immediately stop their children's inappropriate behaviors (Gershoff, 2002). Although corporal punishment (spanking) is a widespread practice, research shows that there are long-term negative consequences for children, such as

physical abuse (Bower-Russa, Knutson, & Winebarger, 2001; Dixon, Browne & Hamilton-Giachritsis, 2005), childhood aggression (Deater-Deckard, Dodge, Bates, & Pettit, 1999; Ulman & Straus, 2003), impaired parent-child relationships (Crockenberg, 1987; Gershoff, 2002), delinquent, criminal, and antisocial behavior (McCord, 1979; Straus & Mouradian, 1998), and depression during adolescence and adulthood (Bender et al., 2007; Holmes & Robins, 1987; Straus, 1994; Straus, Sugarman, & Giles-Sims, 1997). These negative consequences may occur because, through the use of harsh discipline, children learn to be violent rather than to negotiate conflicts with their peers (McCord & McCord, 1959; McLoyd, Jayaratne, Ceballo, & Borquez, 1994; Patterson & Stouthamer-Loeber, 1984).

On the other hand, many parents who might be afraid to use harsh methods may decide not to discipline at all, allowing their children to do as they wish. These parents may become overly permissive. Empirical data suggests that permissive parenting styles also have negative effects on children, such as an inability for children to regulate their emotions, difficulty learning the boundaries and consequences of their behaviors (Flicker & Hoffman, 2002), and an increase in aggression, substance abuse, and school misconduct (Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Patock-Peckham, Cheong, Balhorn, & Nagoshi, 2001).

As an alternative to both harsh discipline and permissive parenting, many practitioners, researchers, and theorists recommend that parents use positive disciplinary practices. The primary goal of positive disciplinary practices is to foster children's social-emotional development through warm, sensitive and consistent caregiving

relationships. One such practice emphasized in this paper is positive guidance. Positive guidance strategies involve positive, specific, and direct language, as well as a series of techniques, such as choice giving, problem-solving, negotiation, redirection to appropriate behaviors, logical and natural consequences, reasoning, conflict negotiation, and limit setting (Flicker & Hoffman, 2002; Gartrell, 2002). By avoiding negative and controlling language, adults can use these techniques in place of harsh and/or overly permissive discipline to promote the development of prosocial behaviors and help children with their inappropriate behaviors. These strategies teach children how to regulate their emotions, to engage in prosocial interactions with peers and adults, to find successful ways to resolve conflict, and to develop positive self-esteem (Gartrell, 1997). In using positive guidance, adults tell children what they *can* do, how to appropriately behave in the moment, and how to apply the acquired skills in future events, instead of telling children what not to do or punishing them for events that happened in the past, which the child may no longer remember and cannot change.

While harsh and permissive discipline does not speak to the relationship between the parent and the child, for positive guidance to be effective, it seems likely that the adult would need to build a relationship of trust with the child. Building this type of social capital requires that the adult must be in tune with the child's needs, provide responsive and consistent care, and be empathetic. When using positive guidance strategies, parents provide a context for the socialization of emotions, enabling children to learn to regulate their affect. Emotion regulation might be facilitated by parents'

ability to express empathy through positive language and by their ability to set and enforce appropriate limits rather than harsh or permissive limits.

Parent intervention programs

In the past decade, researchers and practitioners have steered parents away from overly harsh or permissive discipline methods, hoping to teach parents to engage in more positive discipline practices that still maintain limits with children. Consequently, many interventions and parent training programs have focused on teaching parents to use positive guidance techniques, strategies for coping with stress, and new techniques for strengthening children's social and emotional skills (Christophersen & Mortweet, 2003; Webster-Stratton, Reid, & Hammond, 2001). Impressive research points to the success of many such parenting programs in improving parent-child relationships (Smith, 1997) as well as children's behaviors (McIntyre, 2008; Drugli & Larsson, 2006). However, some parents do not adopt the new strategies they learn in these programs; rather, they fall back on the use of physical punishment (Danoff, Kemper, & Sherry, 1994; Wilson, 1996) or overly permissive methods.

Although recent data suggests that an interactive component to parent training enhances adoption of new parenting techniques (Saunders, 2009), little is known about which parents actually change their disciplinary attitudes and are able to learn and use alternatives to punishment and overly permissive approaches above and beyond being part of an interactive program. In fact, studies linking parents' attachment histories to changes in their parenting attitudes and behaviors are nonexistent.

Parent training in positive guidance

To build upon this line of research and address the above-mentioned limitations, this study will use data collected from the Parent Training in Positive Guidance (PTPG) program. This program provided parents of 2 ½ to 3 ½ year old children with the opportunity to not only learn positive alternatives to overly harsh or permissive discipline but also the opportunity to practice new strategies with toddlers in a classroom staffed with expert teachers. The age of the children was chosen based on the knowledge that two to four year old children are the most likely to experience physical abuse, and their parents report feeling the most frustrated and angry when their children misbehave (Connell-Carrick & Scannapieco, 2007). While data from the PTPG study demonstrated that some people are able to change their attitudes and discipline practices as the result of hands-on training (Saunders, 2009), the question regarding how memories of relationships with parents during childhood affects which parents are more able to change is still open.

Adult Attachment security and the ability to change

Attachment security may play a major role in the openness, willingness, and ability of parents to learn and use positive alternatives to overly harsh or permissive discipline. However, a review of the literature suggests that the connections between memories of attachment histories and the ability to learn positive alternatives to harsh or permissive discipline practices have been understudied. It is important to understand

which parents of preschoolers can benefit from parenting interventions since parents often become harsh and even abusive with their children during this period.

Defined as a "lasting psychological connectedness between human beings" (Bowlby, 1969, p. 194), attachment is an emotional bond formed between children and their caregivers that is believed to have an impact throughout life. According to attachment theory, mothers who are available and responsive to their infants' needs establish a sense of security in their children. Such adults are often classified as secure and value positive attachment relationships with their children. They are less likely to exaggerate or minimize their own or other's emotional distress, and they display more flexibility in thinking about relationship experiences with their parents and children than do parents classified as insecure (Hesse, 2008). The availability and responsiveness they show their infants is expressed through warm, sensitive, and consistent care. Without this type of care, children are more likely to suffer psychological and social impairment.

Many parents have questioned how they can effectively discipline their children without the use of harsh punishment and without becoming too permissive. In other words, parents search for a middle ground that allows them to be child-centered yet still maintain limits for their children's behaviors. Empirical evidence regarding the reasons why some people are able to adopt and use new discipline strategies, whereas others are not, is unclear. The quality of parents' attachment histories may affect their ability to benefit from parent intervention programs designed to foster positive interactions. Parents who experienced warm and consistent care from their own parents are more likely to be secure as adults. These experiences affect their beliefs about how to raise

their own children as well as the quality of care they provide (Anderson & Sabatelli, 2003; Kretchmar & Jacobvitz, 2002). Research focusing on the intergenerational transmission of parenting beliefs and discipline practices has demonstrated that individuals' experiences within their families of origin influence their ability to form positive relationships in all aspects of their lives, and they transmit these representations to the next generation (Deater-Deckard, Lansford, Dodge, Pettit, & Bates, 2003; Holden & Zambarano, 1992; Rodriquez & Sutherland, 1999).

Given the evidence that insecure attachment impacts the quality of the relationship between a mother and her child (Bowlby, 1969), that patterns of parenting are transmitted from one generation to the next (Deater-Deckard, Lansford, Dodge, Pettit, & Bates, 2003; Holden & Zambarano, 1992; Rodriquez & Sutherland, 1999), and that adults' attachment styles may have an impact on their ability to learn new approaches to disciplining, it is possible that these factors may influence the ability of parents to learn new skills and to change their attitudes and behaviors about how they parent their children. Because the possible connections between parents' attachment classifications and their willingness to learn alternative ways to relate to and discipline children are understudied, this paper will address such shortcomings in the attachment and parenting literature. Specifically, the association between mothers' attachment security (secure vs. insecure) and the quality of care they provide for their children as well as the extent to which parents' attachment security influences their abilities to change attitudes and behaviors regarding discipline will be examined.

The Adult Attachment Interview and parental caregiving

According to attachment theory, mothers who experienced sensitive and responsive care as infants themselves are better able to form secure relationships with their own children, whereas mothers who experienced rejecting or neglecting care are more likely to form insecure relationships with their own children. Using the Adult Attachment Interview (AAI), trained coders classify adults as either secure or insecure based on how coherently interviewees discuss and represent their childhood experiences, not based on the actual memories themselves (Main & Goldwyn, 1984; Main, Kaplan, & Cassidy, 1985). These attachment styles are related to adults' current parenting practices with their own children (Kretchmar & Jacobvitz, 2002). While Saunders (2009) demonstrated that people are able to change their parenting attitudes and discipline practices when they participate in an intervention program, this study will examine whether adult attachment styles predict parents' abilities to change above and beyond the intervention.

Knowledge of positive guidance

This study will assess the quality of care mothers give their children by first analyzing mothers' cognitive understanding of positive parenting strategies at the beginning and end of the program. To determine whether adult attachment style influences mothers' abilities to change in their *knowledge* of positive guidance following participation in the parenting program, mothers' understanding of positive guidance will be assessed with the Positive Alternatives Measure before and after the intervention.

This measure is a written assessment that rates mothers' understanding of the use of positive guidance through their use of language when disciplining their children. Past research has shown that mothers participating in parenting programs significantly increase in their knowledge and understanding of positive guidance (Saunders, 2009). However, it is still unknown how mothers' memories of their relationships with their own parents may determine whether they are more or less likely to learn the material.

It is unknown whether insecure or secure mothers are more likely to benefit from a positive guidance program. The hope of any parenting intervention program is to help those parents who are more likely to be harsh or abusive with their children. Thus, regarding attachment security, parenting intervention programs would ideally benefit insecure adults, who are more likely to have insecure relationships with their own children. However, according to attachment theory, it is possible that secure adults may be more open to learn and more likely to retain knowledge of positive guidance than insecure adults because they score higher on coherence of mind on the AAI than insecure adults. Scoring high on coherence of mind may indicate that secure individuals are more likely to be able to organize their ideas about caregiving and the parent-child relationship in a more coherent manner. Therefore, secure individuals may be more likely to organize new information into an already coherent thinking system than insecure people. Further, secure adults are known to display greater flexibility in thinking about relationship experiences with their parents and their own children (Hesse, 2008). This ability may enable secure individuals to be flexible about the new information they learn in parenting seminars and incorporate this knowledge into their parenting. Thus, it is expected that

mothers who are classified as secure on the AAI will significantly differ from insecure adults in their knowledge of positive guidance over time.

Use of positive guidance

In addition to exploring mothers' cognitive changes as related to their adult attachment styles, this paper will explore how mothers' attachment classifications relate to their ability to change in their use of positive guidance behaviorally. To examine the extent to which mothers' security or insecurity may impact their ability to change in their *behavioral* use of positive guidance over time, videotaped interactions between mothers and children (pre- and post-program) will be analyzed.

Research shows that mothers who participated in an intervention program increased in their use of positive guidance strategies in their interactions with their children by the end of the program (Saunders, 2009). However, the degree to which adult attachment security impacts which mothers are most likely to change is not yet established. It is preferable for insecure mothers to benefit the most from an intervention, since they are more likely to use less favorable discipline strategies with their children. Yet, according to attachment theory, an insecure adult attachment status is associated with less flexibility in thought and more difficulty integrating new perspectives, resulting in less responsiveness and more negative interactions with children. Essentially, insecure parents have difficulty constantly modulating their behaviors in response to the changing needs of their children. In addition, secure mothers are more likely to recall loving relationships with their own parents, whereas insecure mothers are more likely to

remember unloving experiences with their parents. In order to use positive guidance effectively, adults must first have trusting and loving relationships with their children. Therefore, a secure parent, who has memories of trust and love from her own childhood, may more easily adopt strategies that are familiar with the way she remembers being parented. In raising children, parents tend to adopt methods of childrearing that are based on the memories of care their own parents provided (Kretchmar & Jacobvitz, 2002). Thus, it is expected that mothers who are classified as secure on the AAI will significantly differ from insecure adults in their use of positive guidance over time.

Empathic responsiveness

Empathic responsiveness is a core component of positive guidance. Empathy is defined as the understanding and sharing of another's emotional state, and it combines both affective and cognitive dimensions of children's development (Hoffman, 2000; Snow, 2000). The cognitive component, or perspective taking, involves the understanding of another's point of view; the affective component involves experiencing emotions such as compassion, tenderness, and sympathy (Psychogiou, Daley, Thompson, & Sonuga-Barke, 2008). The expression of empathy is seen in high quality adult-child interactions. Positive guidance promotes empathy by teaching parents to externalize their feelings by expressing them in words. Adults using guidance do this by speaking in an authentic way, by speaking to the child with respect, and by responding to the child's needs with warmth, sensitivity, and in a consistent manner. To examine the extent to which mothers' security or insecurity may impact their ability to change in their

behavioral use of empathy over time, videotaped interactions between mothers and children (pre- and post-program) will be analyzed.

Research has found links between maternal empathy and secure parent-child attachment (Weinfield, Sroufe, Egeland, & Carlson, 2008). However, the degree to which adult attachment security impacts which mothers will change their empathic responsiveness is not yet established. Again, it is preferable for insecure mothers to benefit the most from an intervention, since they are more likely to use less favorable discipline strategies with their children, however, according to attachment theory, insecure mothers are the least likely to adopt empathic responsiveness. Still, it is possible that both secure and insecure mothers will increase in their levels of empathy as a result of the intervention. Thus, it could be that secure mothers increased in their levels of empathy more than insecure mothers. According to attachment theory, infants form attachments with consistent caregivers who are sensitive and responsive in social interactions with them. Consequently, secure parents are more likely to have received warm and sensitive care from their own mothers and fathers than insecure parents (Kretchmar & Jacobvitz, 2002). In addition, secure parents are more likely to be sensitive to their children's needs and to provide more consistent care than insecure parents. Although other factors may play a role, because secure mothers are more sensitive than insecure mothers in responding to their children's needs, it is possible that this quality allows them to also be more empathic as a result of learning positive guidance. Thus, it is expected that mothers who are classified as secure on the AAI will significantly differ from insecure adults in their empathic responsiveness over time.

Use of permissiveness

Positive guidance uses limit setting and avoids permissiveness in order to promote children's healthy social and emotional development. The philosophy provides tools for parents to relate positively with children in order to set limits and redirect their inappropriate behaviors. It follows that the use of positive guidance may reduce incidents of corporal punishment and overly permissive parenting. Corporal punishment and permissive parenting are two ends of a spectrum, both negatively influencing children's social and emotional development.

Attachment theorists have argued that infants' security is not related to their parents setting appropriate limits in response to their misbehavior. In the only empirical study to test this idea directly, Higgins (2008) found that infant attachment security did not predict mothers' degree of limit setting with their toddlers. Limits are statements delivered in a non-threatening and positive way to children to remind them of the guidelines of appropriate behaviors. Limit setting can be accomplished by offering choices to children, which enables them to feel that they have some control of the situation. When children are offered multiple alternatives to their inappropriate behaviors, they respond better and are more willing to follow directions. Also, when simple limits let children know what they can do, children are more likely to follow the adult's directives. While Higgins (2008) found no link between infant security and limit setting with toddlers, no study has examined the relationship of mothers' attachment security and limit setting with toddlers. Also, recent data demonstrated that parental participation in the PTPG program reduced mothers' level of permissiveness across

conditions (Burton, Roetzel, Saunders, & Jacobvitz, 2009). Thus, this study will investigate how mothers' attachment classifications relate to their levels of behavioral permissiveness with their children by looking at their abilities to set and follow through on limits.

It is preferable for insecure mothers to benefit the most from an intervention, since they are more likely to use less favorable discipline strategies with their children. Thus, it would be desirable for insecure mothers to become less permissive as a result of this parenting program. However, it is more likely that secure mothers decrease in their use of permissiveness, whereas insecure mothers do not change in their behavioral use of permissiveness. From an attachment perspective, it was earlier hypothesized that secure adults would adopt and use positive guidance techniques whereas insecure adults would not. Drawing on research linking an increase in use of positive guidance to a decrease in behavioral permissiveness (Burton et al., 2009), it follows that secure individuals who use positive guidance will decrease in their behavioral permissiveness, whereas insecure adults who do not increase in their use of positive guidance will also not decrease in their behavioral permissiveness. Thus, it is expected that mothers who are classified as secure on the AAI will significantly differ from insecure adults in their level of permissiveness over time.

The role of maternal depression, group placement, and child gender

The present study will also test whether maternal depression, group assignment (seminar-only versus seminar plus hands-on conditions), and children's gender help

explain differences in mothers' abilities to change in their cognitive understanding of positive guidance, in their use of positive guidance, in the empathy they expressed to their children, and in their use of permissiveness over time.

It is possible that mothers who are depressed are less likely to learn and apply parenting techniques. In previous studies, depression has been shown to negatively impact children's attachment to their mothers (Teti, Gelfand, Messinger & Isabella, 1995; Martins & Gaffan, 2000). Also, Saunders (2009) found that while depression did not moderate the effect of groups and time on mothers' *knowledge* of positive guidance, it did moderate the effect of groups and time on mothers' *use* of positive guidance. Thus, depressed mothers are less likely to use positive parenting techniques. Assuming a person is depressed, it is possible that a secure attachment status may buffer the effects of depression on the ability to change caregiving behaviors. Secure individuals are more flexible and coherent in their thinking about relationships, and they may be able to see they are depressed and seek help. In fact, secure individuals are more likely to have positive relationships with people they could reach out to, and they are more likely to seek and participate in therapy (Jacobvitz, 2008). Therefore, it is possible that depression might impact more heavily mothers who are insecure and, hence, hinder their ability to embrace new strategies and change their parenting practices.

In Saunders' (2009) study, it emerged that all participants increased in their knowledge of positive guidance regardless of group placement. However, regarding behavioral use of positive guidance, mothers in the seminar plus hands-on condition benefited from the program more than those in the seminar-only condition. Since being

in the hands-on condition seems to play a role in helping mothers to applying new strategies, it seems possible that security status may interact with group placement to impact the ability of people to assimilate and adopt new ways of parenting. Thus, it is possible that secure individuals may benefit from the program regardless of group placement while insecure mothers may not benefit at all or may only benefit if they participate in the interactive aspect of the program. The hands-on component may be necessary for insecure individuals to integrate new techniques into their interactions with their children.

Finally, research suggests that child gender may impact the way parents discipline and socialize their children (Brody, 1999; Lease & Dahlbeck, 2009). For instance, research shows that parents encourage gender specific activities and toys choices, that parents reinforce independence in boys and closeness in girls, and that they label emotions with girls while explain emotions to boys (Brody, 1999 - Stern & Karraker, 1989; Vogel et al., 1991). In the United States, it is socially acceptable, even expected, for parents to set and follow through on overt limits with their boys, especially regarding aggressive behaviors. Further, it is more culturally acceptable for parents to be permissive, empathic, and positive in their relationships with their girls. Parents of boys, regardless of being secure or insecure, may be equally likely to adopt new positive guidance strategies that employ limit setting because it is culturally acceptable. Parents of girls, however, may have more or less difficulty assimilating positive guidance strategies based on their own attachment security. For example, insecure mothers of girls may have a history of negative experiences and may want to protect their girls from

similar parenting (including their own discipline of their girls). Perhaps their best efforts to protect their girls from negative experiences cause insecure mothers to be more hesitant in adopting parenting strategies, such as limit setting, because they may perceive it as harsh. It follows that gender socialization and stereotyped expectations may have an impact on parents' willingness to learn new ideas about discipline and change how they interact with their children.

Hypotheses

To recap, the overall aim of this study is to **examine the relationship between mothers' representations of attachment (secure vs. insecure) and the extent to which they are able to benefit from participation in a parenting intervention program. Specifically, this study will investigate mothers' attachment representations as related to four areas of their own parenting measured over time: knowledge of positive guidance strategies, use of positive guidance, empathic responsiveness, and level of permissiveness.**

H1: There will be a significant interaction between the independent variables (secure vs. insecure attachment groups and time) on the dependent variable, understanding of positive guidance.

- 1a. Prior to participation in the intervention program, there will be no differences between the two attachment groups (Secure and Insecure) on their understanding of positive guidance.

- 1b. After the program, secure mothers will score significantly higher on understanding of positive guidance than insecure mothers.
- 1c. Over the course of the program, secure mothers are expected to significantly increase in their understanding of positive guidance, whereas insecure mothers are not expected to change.

H2: There will be a significant interaction between the independent variables (secure vs. insecure attachment groups and time) on the dependent variable, use of positive guidance.

- 2a. Prior to participation in the intervention program, there will be no differences between the two attachment groups (Secure and Insecure) on their use of positive guidance.
- 2b. After the program, secure mothers will score significantly higher on understanding of positive guidance than insecure mothers.
- 2c. Over the course of the program, secure mothers are expected to significantly increase in their understanding of positive guidance, whereas insecure mothers are not expected to change.

H3: There will be a significant interaction between the independent variables (secure vs. insecure attachment groups and time) on the dependent variable, empathic responsiveness.

- 3a. Prior to participation in the intervention program, there will be no differences between the two attachment groups (Secure and Insecure) on their empathic responsiveness.

- 3b. After the program, secure mothers will score significantly higher on empathic responsiveness than insecure mothers.
- 3c. Over the course of the program, secure mothers are expected to significantly increase in their empathic responsiveness, whereas insecure mothers are not expected to change.

H4: There will be a significant interaction between the independent variables (secure vs. insecure attachment groups and time) on the dependent variable, use of permissiveness.

- 4a. Prior to participation in the intervention program, there will be no differences between the two attachment groups (Secure and Insecure) on their use of permissiveness.
- 4b. After the program, secure mothers will score significantly lower on use of permissiveness than insecure mothers.
- 4c. Over the course of the program, secure mothers are expected to significantly decrease in their use of permissiveness, whereas insecure mothers are not expected to change.

After testing these hypotheses, the investigator will explore moderating effects of maternal depressive symptoms, group placement (seminar-only vs. seminar plus hands-on conditions), and child gender on secure vs. insecure attachment.

Method

Participants

Participants were part of a longitudinal study assessing the effects of a hands-on parent training program in positive guidance. The sample included 52 mother-child dyads from the Austin area recruited from early childhood classroom waiting lists. Three participants dropped from the study. One was too busy, another did not want to attend the parenting class, and a third was not able to stay with her child during the first week until the child was comfortable in the childcare classroom. Most of the mothers were Caucasian (75.0%) with the remainder Latino (11.5%), Asian (11.5%), and African American (2.0%). Nearly all of the mothers had finished college (57.7%) or graduate school (32.7%) with the rest having had some education post high school (9.6%). The socioeconomic background of the families was as follows: \$0-20,000 (5.8%), \$ 20,001-40,000 (9.6%), \$40,001-60,000 (11.5%), \$60,001-80,000 (25.0%), and >\$80,000 (48.1%). Mothers ranged in age from 26 to 43 years ($M=34$ years), while children's ages ranged from 2.4 years to 3.67 years, ($M= 2.94$ years).

Procedure

Mothers and children participated in a study lasting 12 weeks. Children attended a preschool class twice a week, for three hours each day. All mothers attended a two-hour seminar about positive guidance techniques once a week for 12 weeks. Half of these mothers were randomly assigned to the seminar plus hands-on condition. They spent three hours each week observing and practicing the techniques learned in the

seminar with the children in one of the toddler classes, but not the same class as that their child attended. Prior to the intervention, researchers administered the Adult Attachment Interview to mothers. Both prior to the intervention and again at the completion of the study mothers completed self-report assessments regarding their knowledge of positive guidance and were videotaped for 25 minutes interacting with their child.

Measures

Knowledge of positive guidance

A measure called Positive Alternatives was designed for this study to assess the language mothers use when disciplining their children. This measure was administered to mothers at the beginning and at the end of the program. The measure includes 20 examples of inappropriate phraseology for guiding children's behavior. Examples in the Positive Alternatives measure include: "Don't run", "Stop throwing your toys", and "No whining". Mothers were instructed to rephrase the inappropriate examples by using positive and specific language as well as direct statements that let children know what to do rather than what not to do. Examples of positive language includes: "Please walk", "Keep your toys on the floor", and "Use your words to tell me what's wrong". Based on the degree to which mothers used positive language in their responses, trained coders assigned a value of either zero or one to each of the 20 questions. The final score for each mother ranged from one to 20, (1=low, 20= high). Higher scores indicated more accurate knowledge of positive guidance. Coders were blind to the placement of families

in the control versus treatment groups. The inter-rater reliability between the two coders was .97.

Behavioral use of positive guidance, empathy, and permissiveness

At the beginning and at the end of the program, mothers were videotaped interacting with their children in a Precarious Room for 25 minutes. The interaction consisted of 20 minutes of play and five minutes of clean-up (Dix, Gershoff, Meunier, & Miller, 2004). The room contained both age appropriate toys as well as items, denoted as research supplies, considered to be problematic for children such as a cell phone, a set of keys, a sealed jar of candy, a pitcher of water, a stack of drinking cups, stacks of videotapes and papers, and research equipment. The latter items were placed in the room with the purpose of eliciting limit setting by the mothers. Mothers were told the children could use the toys, but they were instructed to keep their children away from the research supplies and equipment and to have their children help clean up the toys, at the end of the play time. Trained coders assessed these pre and post videotaped interactions for mothers' behavioral use of positive guidance, empathy, and permissiveness. These three variables were coded on a 7-point Likert scale (1 = low; 7 = high). To address the reliability, the 4 coders practiced the scales to establish inter-rater reliability by coding few of the videotapes and discussing issues and disagreements with the principal investigator until consensus was reached. Reliability was tested on all the instances of use of positive guidance and coders' agreement was .68 on the pre scores and .83 on the post scores.

Use of positive guidance was conceptualized as the use of discipline strategies through the suggestion of positive alternatives to mistaken behaviors. By using positive statements, the parents tell their child what to do rather than what NOT to do, and they set reasonable limits and follow up on these limits. Examples of positive guidance coded in the videotapes included use of language, appropriate discipline such as, mother avoids insulting/guiling/shaming and other punitive discipline strategies, mother scaffolding play, mother anticipates, prevents, or redirects mistaken behaviors, and mother helping child regulate his/her emotions.

Empathy was conceptualized as the capacity to understand what another person is experiencing from within that person's frame of reference. The adult must externalize this feeling, express it in words, and act in a consistent manner to receive a high score. Specifically, coders looked for empathetic responses from the mother when the child was in need (immediate or non-immediate) or distressed. Examples of empathy coded in the videotapes included mother showing sensitivity when the child was in distress or in need, mother responding to immediate as well as non-immediate needs, and mother able to calm child in distress. Reliability was tested on all the instances of use of empathy and coders' agreement was .70 on the pre scores and .79 on the post scores.

Permissiveness was conceptualized as the attitude that grants freedom of expression and activity to another individual, but not necessarily with sanction or approval. The permissive mother does not set limits or clear expectations and allows the child to engage in inappropriate behaviors. Examples of permissive behaviors coded in the videotapes included lack or inability to set limits when appropriate, lack or inability

to follow through with set limits, and mother ignoring child's inappropriate behavior. Coders were blind to the research questions and to the placement of families in the control versus treatment groups. Reliability was tested on all the instances of use of permissiveness and coders' agreement was .70 on the pre scores and .63 on the post scores.

Adult attachment classification

Adult attachment classification was assessed using the Adult Attachment Interview (AAI). The AAI is a semi-structured interview that consists of 20 questions aimed at unveiling the individual's Internal Working Model of attachment. Adults' current states of mind are assessed with respect to the influence of early relationships with parents and the influence of trauma or loss of important persons. The classification is based on present state of mind and coherence of discourse, not on actual memories of childhood experience. The interviews varied in length from 45 to 90 minutes, they were administered pre-treatment, and trained transcribers typed them verbatim. Coding was executed by trained coders, certified as reliable in adult attachment classification system (Main, Goldwyn, & Hesse, 2003).

Trained and reliable coders rated transcripts on five 9-points scales (1=low, 9=high) for memories of relationships with mothers and fathers and seven scales for current state of mind. The five childhood experience scales included: loving/unloving, rejection, role reversing/involving, neglect, and pressure to achieve. The seven scales for

current state of mind included: idealization, lack of recall, derogation, fear of loss, involving anger, passivity, and coherence.

Based on the degree of coherence of discourse for each interviewee, coders categorized participants into secure, dismissing, preoccupied, unresolved, and cannot classify categories. For analysis purposes, dismissing and preoccupied categories were collapsed into one group, called insecure, while the unresolved and cannot classify categories were forced to their next best fitting category, which could be either secure or insecure. Furthermore, mother and father loving scales as well as the AAI major classifications were used to partition subjects into continuous-secure, earned-secure, and insecure groups.

Depressive symptoms

Depressive symptoms in mothers were measured with the Center for Epidemiological Studies Depression Scale (CES-D) (Radloff, 1977). The CES-D is a short commonly used self-report instrument designed to measure depressive symptoms or psychological distress in the general population. The 20-item self-administered scale assesses major components of depressive symptoms, such as depressive mood, feelings of guilt and worthlessness, loss of appetite, and sleep disturbance. Scores range from 0 to 60, with higher scores indicating a greater level of depressive symptoms. Internal consistency is about .85 in the general population.

Treatment group placement

Treatment group placement was identified for each of the participants in the study. A categorical variable, mothers were assigned a value of 0 if they were in the seminar-only condition and a value of 1 if they were in the seminar plus hands-on condition.

Child gender

Child gender was determined for each of the children in the study. A categorical variable, boys were assigned a value of 0, and girls were assigned a value of 1.

Results

Descriptive statistics

Descriptive statistics are presented in Table 1 for mothers' understanding of positive guidance (Positive Alternatives measure), use of positive guidance, empathic responsiveness, level of permissiveness, and self-reports of depressive symptoms. Specifically, means and standard deviations for each of the variables are reported at two time points, both before and after the program (see Table 1). Frequencies for mothers' attachment classification and children's gender are reported in Table 2.

The first aim of this study was to explore differences between secure and insecure mothers with respect to change in their understanding of positive guidance, ability to use positive guidance, empathic responsiveness to their child, and level of permissiveness over the course of an intervention program. To address this aim several two-way repeated measure ANOVAs were conducted, with mothers' attachment classification and time entered as independent variables and understanding of positive guidance, use of positive guidance, empathic responsiveness, and level of permissiveness entered as separate dependent variables.

The second aim of this study was to investigate whether maternal depressive symptoms, treatment group placements, and child gender moderated the effects of groups (secure vs. insecure) and time on mothers' understanding of positive guidance, use of positive guidance, empathic responsiveness, and level of permissiveness over time. To address this aim, a series of three-way repeated measures ANOVAs were conducted.

Understanding of positive guidance

A two-way repeated measures ANOVA was conducted to examine whether there was a significant interaction between the independent variables (groups and time) on the dependent variable, understanding of positive guidance. Contrary to the first hypothesis, the interaction between the independent variables, attachment classification and time, on the dependent variable, understanding of positive guidance, was not significant, $F(1, 45) = 2.34, p = .13$ (see Table 3). Thus, attachment classification and time do not interact on understanding of positive guidance (see Figure 1).

An independent-samples t-test was performed to explore hypothesis 1a and 1b, which looked at pre and post scores of secure vs. insecure mothers. This test showed that the two attachment groups did not significantly differ in their understanding of positive guidance in the beginning or at the end of the program. Specifically, the t-test failed to reveal a statistical difference between the mean scores of secure ($M=9.51, s=3.23$) and the mean scores of insecure mothers ($M=10.03, s=2.65$) before the intervention, $t(48) = 0.568, p = 0.257, \alpha = .05$, as well as after the intervention (secure: $M = 12.63, s = 3.354$; insecure mothers $M = 12.72, s = 2.572$; $t(45) = 0.089, p = 0.291, \alpha = .05$) (see Figure 1; see Table 4).

Regarding the main effect of groups on understanding of positive guidance, the two groups (secure vs. insecure) did not differ in their aggregate scores (pre and post combined), $F(1, 45) = .79, p = .38$ (see Table 3). A significant main effect of time on understanding of positive guidance was found, $F(1, 45) = 49.85, p = .00$ (see Table 3), confirming previous research findings that participants in parenting education programs

increase in their knowledge over time (Saunders, 2009). Thus, mothers improve in their understanding of positive guidance regardless of their attachment classification, and their gains in understanding are unrelated to their group (secure vs. insecure) categorization.

Maternal use of positive guidance

A two-way repeated measures ANOVA was conducted to examine whether there was a significant interaction between the independent variables (groups and time) on the dependent variable, use of positive guidance. Contrary to the second hypothesis, the interaction between the independent variables, groups and time, on the dependent variable, use of positive guidance, was not significant. Specifically, there was no significant interaction of attachment classification and time on the use of positive guidance, $F(1, 44) = .02, p = .88$ (see Table 5).

The main effects of groups and time on the dependent variable, use of positive guidance, were examined to determine whether there was a difference between groups on their aggregate (pre and post) scores of use of positive guidance and whether the participants in aggregate increased in their use of positive guidance. Regarding the main effect of groups on use of positive guidance, the two groups (secure vs. insecure) did not differ in their aggregate scores (pre and post combined), $F(1, 44) = .01, p = .92$ (see Table 5). The main effect of time on use of positive guidance was also not significant, $F(1, 44) = 1.19, p = .28$ (see Table 5). That is, as a whole, participants in this study did not significantly change in their use of positive guidance over the course of the program. Also, an independent-samples t-test was performed to explore hypothesis 2a and 2b,

which looked at pre and post scores of secure vs. insecure mothers. The t-test failed to reveal a statistical difference between the mean scores of secure ($M=3.95$, $s=1.146$) and insecure mothers ($M=4$, $s=1.268$) before the intervention, $t(45) = 0.126$, $p = 0.999$, $\alpha = .05$. The t-test revealed a statistical difference between the mean scores of secure mothers ($M = 4.23$, $s = 1.322$) and insecure mothers ($M = 4.19$, $s = 1.834$) after the program, $t(45) = 0.082$, $p = 0.015$, $\alpha = .05$ (see Figure 2; see Table 6).

Maternal empathic responsiveness

A two-way repeated measures ANOVA was conducted to explore whether there was a significant interaction between the independent variables (groups and time) on the dependent variable, empathic responsiveness. Contrary to the third hypothesis, there was no significant interaction of attachment classification and time on the empathic responsiveness, $F(1, 44) = .90$, $p = .35$ (see Table 7).

Main effect analyses investigating whether all participants in aggregate increased in their empathic responsiveness over time as well as whether the groups differed on their aggregate scores (pre and post combined) of empathic responsiveness were examined. There was no main effect of groups on empathic responsiveness, meaning that the two groups did not differ in their aggregate scores (pre and post combined) of empathic responsiveness, $F(1, 44) = .36$, $p = .55$ (see Table 7). A main effect of time on empathic responsiveness was found, $F(1, 44) = 31.54$, $p = .00$ (see Table 7). Thus, all participants significantly increased in their empathic responsiveness over the course of the program. Also, an independent-samples t-test was performed to explore hypothesis 3a and 3b,

which looked at pre and post scores of secure vs. insecure mothers. The t-test failed to reveal a statistical difference between the mean scores of secure ($M=4.66$, $s=1.279$) and insecure mothers ($M=4.33$, $s=1.435$) before the intervention, $t(45) = 0.776$, $p = 0.897$, $\alpha = .05$. The t-test revealed a statistical difference between the mean scores of secure mothers ($M = 5.52$, $s = 0.944$) and insecure mothers ($M = 5.22$, $s = 1.844$) after the program, $t(45) = 0.735$, $p = 0.026$, $\alpha = .05$ (see Figure 3; see Table 8).

Maternal level of permissiveness

A two-way repeated measures ANOVA was conducted to explore whether there was a significant interaction between the independent variables (attachment groups and time) on the dependent variable, level of permissiveness. Contrary to the fourth hypothesis, the interaction between the independent variables, groups and time, on the dependent variable, level of permissiveness, was not significant, $F(1, 44) = .37$, $p = .55$ (see Table 9).

Analyses examining the main effect of groups on level of permissiveness revealed no significant differences for attachment classification, $F(1, 44) = .11$, $p = .75$ (see Table 9). A significant main effect of time on level of permissiveness was found when collapsing attachment classification, $F(1, 44) = 6.92$, $p = .01$ (see Table 9), providing evidence that all mothers decreased in their level of permissiveness over time. Also, an independent-samples t-test was performed to explore hypothesis 4a and 4b, which looked at pre and post scores of secure vs. insecure mothers. The t-test failed to reveal a statistical difference between the mean scores of secure ($M=3.78$, $s=1.326$) and

insecure mothers ($M=3.70$, $s=1.73$) before the intervention, $t(45) = 0.177$, $p = 0.184$, $\alpha = .05$. Additionally, there was no statistical difference between the mean scores of secure ($M = 2.87$, $s = 1.623$) and insecure mothers ($M = 3.31$, $s = 1.769$) after the program, $t(45) = 0.857$, $p = 0.511$, $\alpha = .05$ (see Figure 4; see Table 10).

Moderator variables – Maternal depressive symptoms, treatment group placement, and child gender

Three-way repeated measures ANOVAs were conducted for secure vs. insecure mothers to explore the moderating effects of maternal depressive symptoms, treatment group placement, and child gender on the dependent variables. Because maternal depressive symptoms is a continuous variable, pre CES-D scores were entered as a covariate. Due to the categorical nature of treatment group placement and child gender, these variables were entered into the model as factors. Also, because previous studies conducted by Saunders (2009) revealed that participants respond better to the intervention when they are in the treatment group, in this study the treatment group placement was controlled for when exploring moderating effects of maternal depressive symptoms and child gender on all four dependent variables.

For the first dependent variable, understanding of positive guidance, three-way repeated measures ANOVAs revealed no significant moderating effects on the interaction of secure vs. insecure attachment classification and time for maternal depressive symptoms ($F(1, 43) = .36$, $p = .55$), treatment group placement ($F(1, 43) = .86$, $p = .36$), or child gender ($F(1, 43) = .16$, $p = .69$; see Table 11). When controlling for treatment

group placement, the analyses also failed to reveal significant moderating effects for maternal depressive symptoms ($F(1, 40) = .70, p = .56$, and child gender ($F(1, 39) = 1.69, p = .20$). These results indicate that none of maternal depressive symptoms, treatment group placement, or child gender moderated the extent to which secure versus insecure mothers changed in their understanding of positive guidance from pretest to posttest. Also no significant impact was found of treatment group placement, meaning that treatment group condition did not have an impact on whether mothers changed in their knowledge of guidance.

For the second dependent variable, use of positive guidance, three-way repeated measures ANOVAs revealed no significant moderating effects on the interaction of secure vs. insecure attachment classification and time for maternal depressive symptoms ($F(1, 42) = .49, p = .49$), treatment group placement ($F(1, 42) = 1.96, p = .17$), and child gender ($F(1, 42) = 1.00, p = .32$; see Table 12). When controlling for treatment group placement, the analyses also failed to reveal significant moderating effects for maternal depressive symptoms ($F(1, 39) = 2.51, p = .07$) and child gender ($F(1, 38) = .10, p = .76$). These results indicate that none of maternal depressive symptoms, treatment group placement, or child gender moderated the extent to which secure versus insecure mothers changed in their use of positive guidance from pretest to posttest. Also, no impact of treatment group placement was found, therefore treatment condition did not affect maternal attachment and use of positive guidance.

For the third dependent variable, empathic responsiveness, three-way repeated measures ANOVAs revealed no significant moderating effects on the interaction of

attachment classification and time for maternal depressive symptoms ($F(1, 42) = .00, p = .97$), treatment group placement ($F(1, 42) = 1.06, p = .31$), and child gender ($F(1, 42) = .67, p = .42$; see Table 13). When controlling for treatment group placement, the analyses also failed to reveal significant moderating effects for maternal depressive symptoms ($F(1, 39) = .58, p = .63$) and child gender ($F(1, 38) = .95, p = .34$). These results indicate that none of maternal depressive symptoms, treatment group placement, or child gender moderated the extent to which secure versus insecure mothers changed in their empathic responsiveness from pretest to posttest even when controlling for treatment group placement.

For the fourth dependent variable, level of permissiveness, three-way repeated measures ANOVAs were again conducted. Whereas the analyses revealed no significant moderating effects on the interaction of attachment classification and time for maternal depressive symptoms ($F(1, 42) = 1.18, p = .28$) or for child gender ($F(1, 42) = .03, p = .87$), a significant interaction was found between the three independent variables – treatment group placement (seminar-only vs. seminar plus hands-on condition), attachment classification, and time, $F(1, 42) = 6.21, p = .02$ (see Table 14). When controlling for treatment group placement, the analyses failed to reveal significant moderating effects for maternal depressive symptoms ($F(1, 39) = 2.23, p = .10$) and child gender ($F(1, 38) = .85, p = .36$).

To explore the significant results, further decompositions of the interactions performing two-way interactions within the three-way repeated measures ANOVAs were conducted.

First, a two-way interaction between attachment classification and time revealed that insecure mothers at time two marginally differed in their level of permissiveness based on whether they were in the seminar-only or hands-on groups ($p = .06$). Specifically, for insecure mothers at time two, seminar-only mothers were rated higher than hands-on mothers on permissiveness. Second, a two-way interaction between treatment group placement and time revealed that there were no significant differences pre or post between the secure and insecure groups on their level of permissiveness, regardless of whether they were in the seminar-only or hands-on groups. Third, a two-way interaction between treatment group placement and attachment classification revealed that insecure mothers in the hands-on group significantly decreased in their permissiveness over time ($p = .02$) and that secure mothers in the seminar-only group significantly decreased in permissiveness over time ($p = .004$) (see Table 15; Figure 5).

Discussion

The present study drew on attachment theory to examine whether mothers' attachment statuses are associated with their ability to change parenting beliefs and behaviors over the course of a parenting intervention program. The first aim of this study was to explore how attachment security facilitates or inhibits mothers' ability to learn and apply newly acquired parenting techniques, specifically, their understanding of positive guidance, their use of positive guidance, their empathic responsiveness to their child, and their ability to set and follow up with appropriate limits when needed rather than being permissiveness over the course of a parenting intervention program. The second aim of the study was to explore whether moderating variables such as maternal depressive symptoms, child's gender, and treatment group placement might moderate the interaction of attachment security and time on mothers' abilities to understand positive guidance, use positive guidance, respond empathically, and to use lower levels of permissiveness. First, reasons why attachment classification did not appear to affect who benefited from the parenting program will be explored from an attachment perspective. Then, the moderation of treatment group placement on the interaction of attachment classification and time on use of permissiveness will be explained. Finally, limitations and future directions of this study will be presented.

Adult attachment security and the ability to change

Contrary to predictions, and without taking into account moderating variables, no significant interactions were found between attachment classification and time for the

four outcome variables. In large part, this study did not support the idea that secure mothers would benefit more from a parenting intervention program than insecure mothers.

First, it was expected that secure and insecure mothers would significantly differ over time in their knowledge of positive guidance. Based on attachment theory, secure individuals are able to coherently organize their thoughts about parent-child relationships. Therefore, secure individuals should be more likely than insecure individuals to assimilate and organize new parenting information into an already coherent relationship thought structure. However, the interaction between attachment and time on the knowledge of positive guidance was non-significant. It follows that attachment did not affect mothers' abilities to learn new parenting practices over the course of the intervention. In addition, it was found that all participants in aggregate increased in their knowledge of positive guidance over time, confirming previous studies that all parents learn information presented in parenting education programs (Drugli & Larsson, 2006; McIntyre, 2008; Saunders, 2009). It is also evident from the means that the mean average of the insecure group was a slight higher number than the mean average of the secure group on knowledge of positive guidance both before and after the program. This indicates that a larger number of participants might increase the likelihood of finding statistical significance in future studies. Thus, replication of the current study with a larger sample might be necessary to fully explore the research questions.

Regarding hypothesis two, it was thought that secure and insecure mothers would significantly differ over time in their use of positive guidance. The analysis revealed no

significant interaction of attachment groups and time on the use of positive guidance. Additionally, no main effects of groups or time was found, meaning that there was no difference in mothers' aggregate scores and all participants in aggregate did not increase in their use of positive guidance over time. This was expected, as previous research found that the seminar plus hands-on group significantly increased in their use of positive guidance over time, whereas the seminar-only group decreased in their use of positive guidance, though not significantly (Saunders, 2009). Thus, it was expected that all participants would not increase in their use of positive guidance as a whole.

When considering all participants as a whole, it is possible that neither secure nor insecure mothers adopted and used positive guidance strategies as a result of the intervention because their interactions with their children may represent habits and rituals that have been formed and reinforced over many years (Leon & Jacobvitz, 2003). It takes time to change habits, perhaps more time than the 12 weeks of the PTPG intervention. Second, attention should be drawn to the fact that this program taught new parenting techniques only to mothers. When these mothers go home, they may face social pressure from their spouses, extended family members, or friends to continue their former parenting styles. Thus, mothers who are learning new ideas may not have the social support necessary to assimilate and try out the new information. Also, it is possible that the small number of participants makes it challenging to find significance.

Regarding hypothesis three, it was thought that secure and insecure mothers would significantly differ over time in their empathic responsiveness toward their children. Even though analyses show no interaction of attachment and empathy on time,

overall, participants significantly increased in their aggregate level of empathy, regardless of their classification. Positive guidance is characterized by two components: a mechanical aspect that focuses on use of positive, specific, and direct language, and a relational aspect that focuses on building a trusting relationship. While it might be easier for all the mothers in the program to learn and understand the mechanical aspects of positive guidance, we saw that it was more difficult for all mothers in the program (in aggregate) to implement the mechanical aspect, something that cannot be pretended on camera. Being empathetic, however, is a social skill most adults can access, especially for short periods of time. It is possible that empathy increased for all participants because they perceived that the researchers and the project desired them to exhibit more empathic responsiveness towards their children. For secure individuals who already have a foundation of trust with their children, it is possible that learning the technical aspects of positive guidance allowed them to readily show more empathy in their relationships, which will hopefully be maintained because the benefits of higher empathy fit well within their secure internal working model. For insecure individuals, it is possible that the increase is simply due to a perceived social pressure to exhibit a quality they have access to but do not readily rely on when interactions are more extensive. In other words, perhaps it is possible for all participants to display more empathy during a 20 minute videotaped interaction – the question is whether or not these levels will be maintained over time.

Contrary to the final hypothesis, this study found that attachment status does not interact with time on level of permissiveness. A main effect of time was found,

confirming previous studies that all participants decreased their average level of permissiveness (Burton, Roetzel, Saunders, & Jacobvitz, 2009). It was expected for secure participants to have an easier time understanding and implementing limit setting with their children. A possible explanation for why both secure and insecure mothers successfully decreased in their levels of permissiveness is that limit setting is a fairly basic parenting skill and is easily taught, understood, and acquired. In fact, limit setting was the first topic discussed in the parenting seminars, and it was revisited and practiced throughout the program. While limit setting might initially be more incongruent to the internal working models and parenting schemas of insecure mothers, perhaps their willingness to learn new parenting strategies and their persistence in completing the program enabled them to pick up on some of the more basic positive guidance skills. Whether or not their decreases in permissiveness have remained once the support of the program ended is unknown. Also, it has been demonstrated that attachment security and limit-setting are unrelated. According to Higgins (2008), infant attachment security is not predictive of mothers' degree of limit setting with their toddlers. Thus, attachment security may not bear any weight on parents' ability and inclination to set limits.

Moderator variables – Maternal depression, treatment group placement, and child gender

The present study also tested whether maternal depression, treatment group placement, and children's gender might help explain differences in mothers' abilities to change in their cognitive understanding of positive guidance, behavioral use of positive

guidance, empathic responsiveness, and level of permissiveness over time. Treatment group placement was controlled for in all moderating variable analyses.

Even controlling for treatment group placement, depression did not moderate the effect of attachment status and time on any of the dependent variables – knowledge of positive guidance, use of positive guidance, empathic responsiveness, and level of permissiveness. One possible reason is that attachment security is related to depressive symptoms. Specifically, Roberts, Gotlib, & Kassel (1996) found that insecure attachment leads to depressive symptoms in adults because of its impact on self-worth and self-esteem. For purposes of this study, depression may not have had a moderating impact because it is already inherently related to attachment security. In other words, attachment security may be explaining any effects of depression as a variable on its own.

Group placement by itself was found to moderate the extent to which attachment security and time interact on level of permissiveness. Upon further inspection, insecure mothers who were in the seminar-only condition were rated marginally higher than hands-on mothers on permissiveness at time two, while insecure mothers in the hands-on condition significantly decreased in their permissiveness over time. Note that insecure mothers did not differ from each other at time one on their level of permissiveness, regardless of whether they were in the seminar-only or seminar plus hands-on groups. In other words, insecure mothers who are permissive with their children benefit most from this parenting intervention program if they are in the seminar plus hands-on treatment group.

Regarding the moderating effect of treatment group placement for secure mothers, secure mothers in the control group significantly decreased in their levels of permissiveness over time. While secure mothers in the treatment group decreased their levels of permissiveness on average from time one to time two, this decrease was not significant. Given that all participants decreased in permissiveness over time as a result of this program, it is clear that secure mothers in general seem to benefit regardless of their treatment group placement. Insecure mothers, however, have a significantly better chance of decreasing their permissive behavior if they participate in the seminar plus hands-on program.

It is possible that insecure mothers needed the extra help and tools offered in the hands-on part of the program. While secure mothers' higher coherence of mind may have enabled them to make clearer representations of the concepts learned in a lecture format and later to implement them on their own, insecure mothers needed the interactive part that allowed them to practice the new techniques that they learned. Also, working in a class with children may have helped insecure mothers to not only understand the guidance in a deeper level, but also to observe and try how strategies work as well as gain more confidence in their ability to set and follow up on limits. Future implementations of this program should offer the hands-on option to all participants – we know from previous research that those in the hands-on condition are more likely to use positive guidance with their children (Saunders, 2009), but also the hands-on nature helps insecure mothers to be less permissive when they interact with their children.

Limitations and future directions

This study was limited by a relatively small sample size and should be replicated with a larger sample. The small number of participants limited the statistical power impacting the likelihood of finding significance that was expected by the investigator. In addition, the sample size was relatively non-diverse. This study included mostly Caucasian middle class mothers with mid to high incomes and college educations. A high education level in participants could cause the mothers in this sample to be more open to learning new ideas about parenting. Also, their education may cause them to be more aware of gender stereotypes. Although the research team welcomed minority, diverse education backgrounds, and low-income parents, those who chose to participate were more likely to be highly educated and affluent. The study should be replicated with samples including other cultures and ethnicities, as well as low-income families, and a diverse sample with a wide range of educational background. Teti et al's intervention (Steele & Steele, 2008) demonstrated how AAI classification predicted parental commitment to interventions for economically disadvantaged and premature infants. Based on countless research findings demonstrating that premature infants are at high risk for an array of developmental delays and based on the fact that children born in poverty are at risk for language as well as social and cognitive delays, this intervention should target children born in poor families and aim to improve caregiving behaviors and establish mutual positive child-parent interactions.

In addition, the study included mothers only. Attachment theory states that infants need to develop a relationship with at least one primary caregiver for social and

emotional development to occur normally, therefore the organization of attachment bonds are fundamentally important and have deep implications for mental health and wellbeing. How a father's attachment classification might impact his parenting skills is important to explore. Fathers interact with their children by stimulating and regulating their emotions in the context of play (MacDonald and Parke, 1986; Grossman, Grossman, Fremmer-Bombik, Kindler, Scheuerer-Engelsch,

& Zimmermann, 2002), while mothers interact in a wider variety of contexts. It is possible that mothers are socialized to be sensitive caregivers while fathers are socialized to be "tough". Therefore, it would be interesting to explore how attachment interacts with both parents' genders to predict how their attitudes and behaviors might change.

Furthermore, because fathers were not learning the information at the same time as their partners, it is possible that they did not agree with the new practices because they were not exposed to the rationale and provided the opportunity to understand first hand. A potential mismatch in parenting philosophies between parents may have constituted an obstacle for the mothers at home, and this may have impacted their willingness to change their behaviors as well. If implemented in the future, any parenting program such as the one in this study should involve both parents, if possible, to maximize the benefit.

A major contribution of this study was that insecure individuals benefit from parenting intervention programs when they have the opportunity to practice as well as learn the material presented to them. This underlines the importance of creating intervention programs that emphasize interaction and practice in addition to a lecture format. If such parenting programs were widely accessible to parents with insecure adult

attachment styles, it may be possible to positively impact their relationships with their own children and change the course of the next generation.

Figures

Figure 1

Mean Averages for Secure and Insecure Groups on Understanding of Positive Guidance

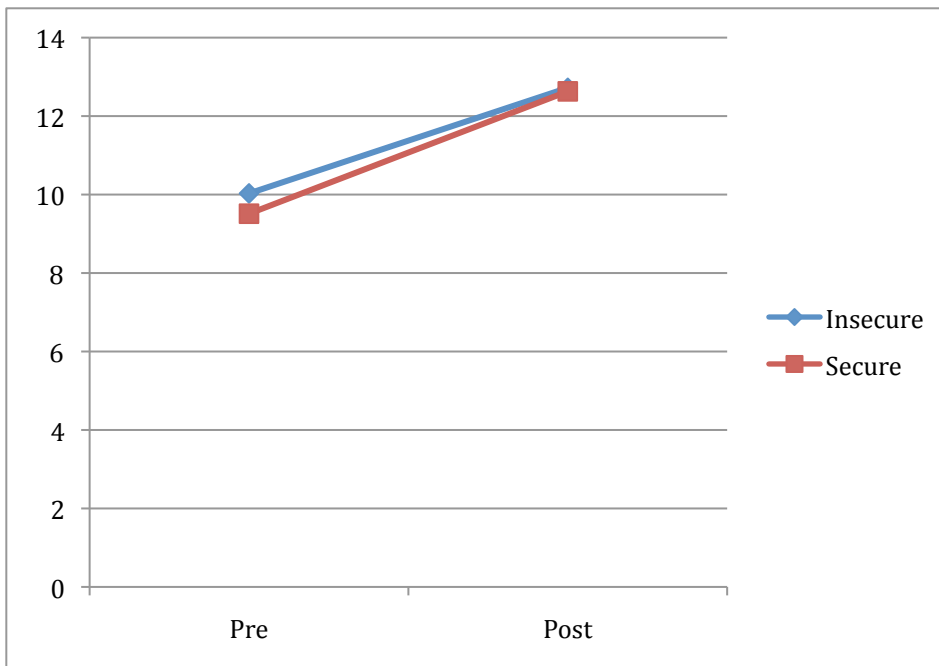


Figure 2

Mean Averages for Secure and Insecure Groups on Use of Positive Guidance

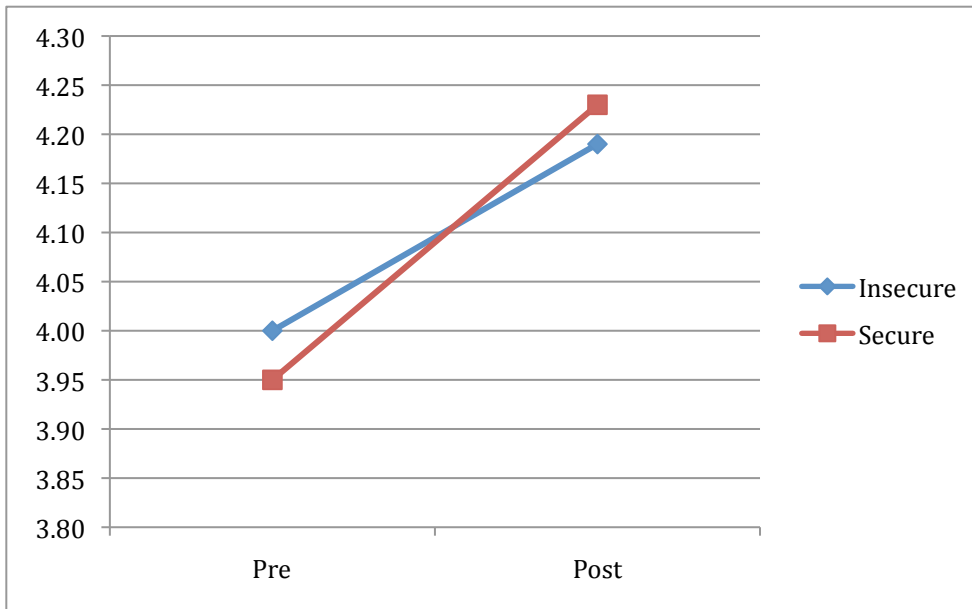


Figure 3

Mean Averages for Secure and Insecure Groups on Empathic Responsiveness

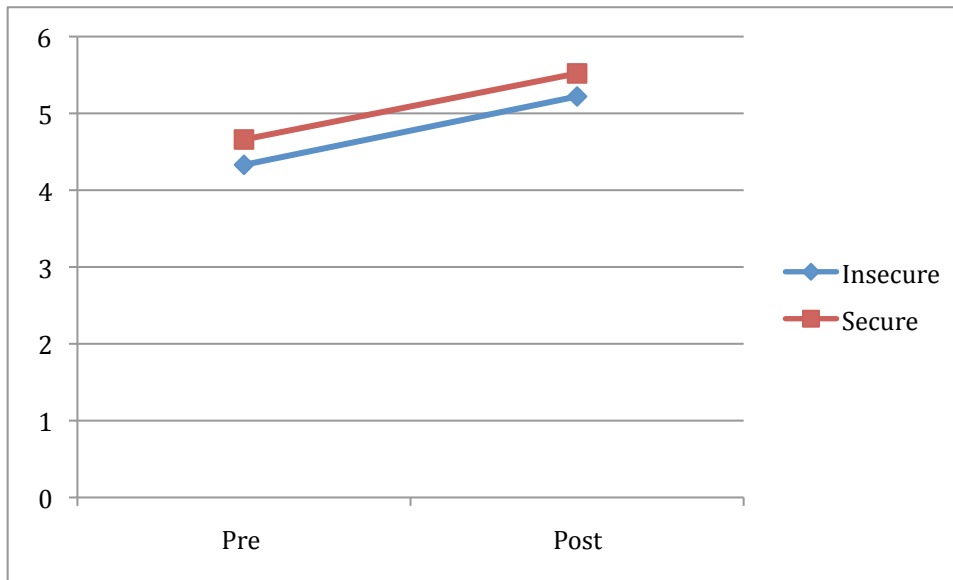


Figure 4

Mean Averages for Secure and Insecure Groups on Level of permissiveness

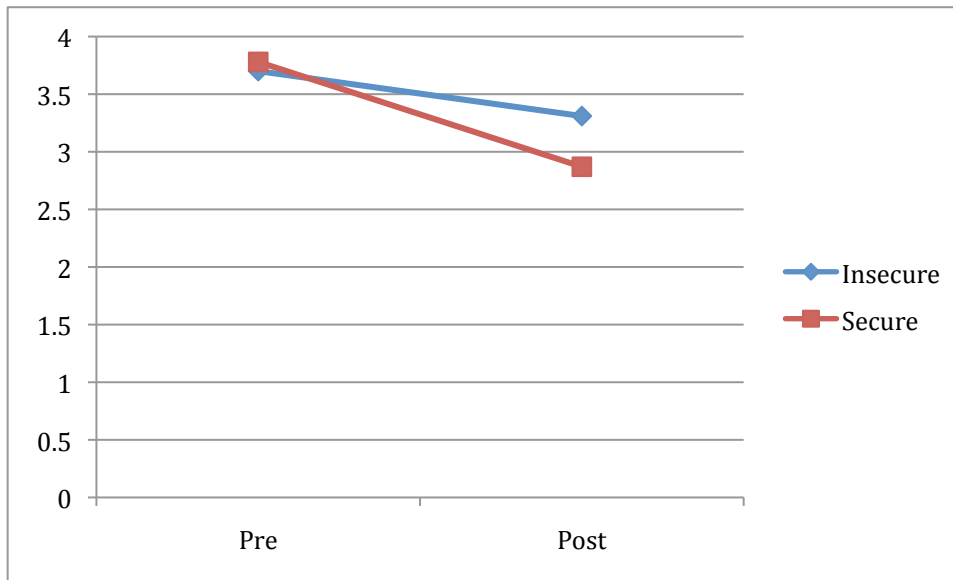
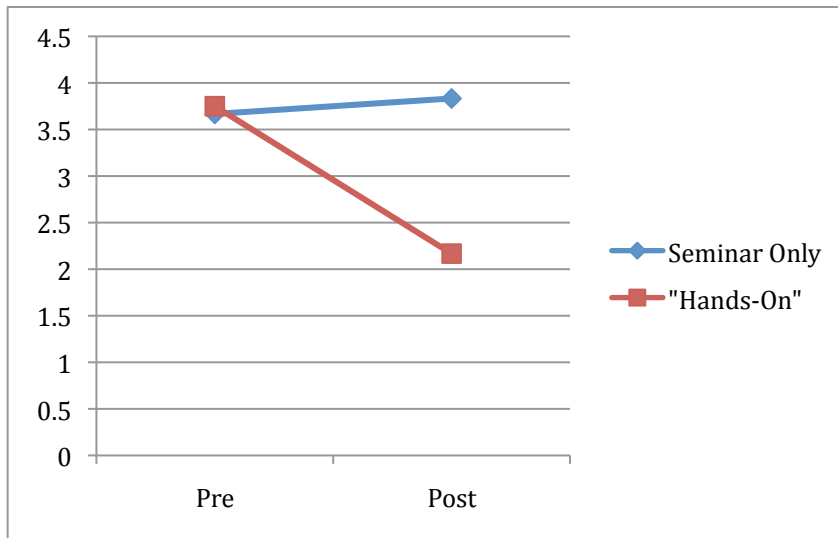


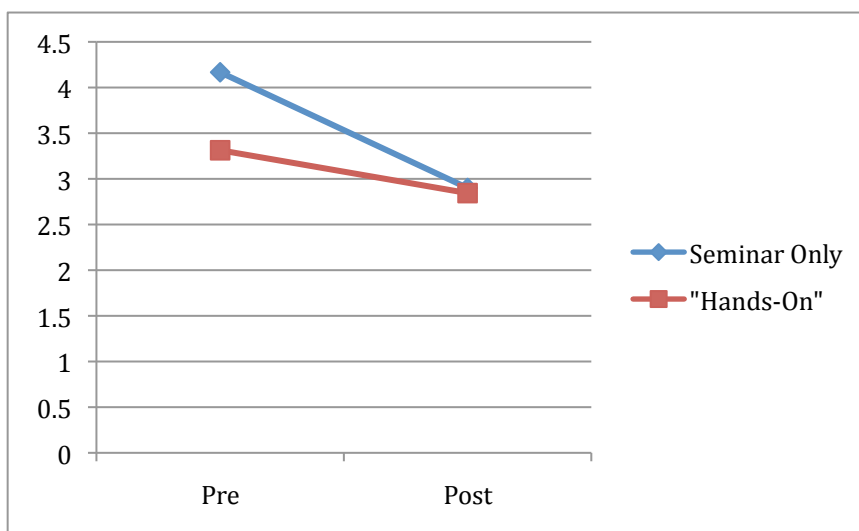
Figure 5

The Interaction of Treatment Group Placement, Attachment Classification, and Time on Level of Permissiveness

Insecure



Secure



Tables

Table 1

Summary of Means, Standard Deviations, and Ranges for Understanding of Positive Guidance, Use of Positive Guidance, Empathic Responsiveness, Level of Permissiveness, and Maternal Depressive Symptoms

	Mean	(SD)	N	Range	
				Min	Max
Understanding of Positive Guidance					
Pre	9.75	(3.01)	52	3	17
Post	12.64	(3.07)	49	6	19
Use of Positive Guidance					
Pre	3.98	(1.19)	50	2	6
Post	4.26	(1.48)	49	2	7
Empathic responsiveness					
Pre	4.56	(1.32)	50	2	7
Post	5.45	(1.29)	49	1	7
Level of permissiveness					
Pre	3.71	(1.46)	50	2	7
Post	2.97	(1.65)	49	1	7
Maternal Depressive symptoms					
Pre	8.81	(6.41)	53	0	28

Table 2

*Frequencies for Attachment Classification, Treatment Group Placement, and Children's
Genders*

	Frequency	Percent	Valid Percent
Mothers' Attachment classification			
Secure	34	54.8	66.7
Insecure	17	27.4	33.3
Mothers' Group Placement			
Seminar-only	26	41.9	48.1
Seminar + Hands-on	28	45.2	51.9
Child Gender			
Male	31	50.0	57.4
Female	23	37.1	42.6

Table 3
Differences Between Secure and Insecure Mothers in their Understanding of Positive Guidance Over Time

Secure vs. Insecure	df	F	<i>p</i> -value
Within Subjects			
Time	1	49.85	.00
Time*Twoclass	1	2.34	.13
Error	45		
Between Subjects			
Twoclass	1	.79	.38
Error	45		

Table 4

Mean Scores and Independent Sample Test on Knowledge of Positive Guidance for Secure and Insecure Mothers

Variable	Mothers' attachment classification	N	Mean	Std. Deviation	Std. Error Mean
Positive Alternatives Pre					
	Insecure	17	10.03	2.65	0.64
	Secure	33	9.51	3.23	0.56
Positive Alternatives Post					
	Insecure	16	12.72	2.57	0.64
	Secure	31	12.63	3.35	0.60

Independent Samples Test

Variable	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Positive Alternatives Pre							
Equal variances assumed	1.318	0.257	0.568	48	0.573	0.51729	0.91034
Equal variances not assumed			0.606	38.638	0.548	0.51729	0.85345
Positive Alternatives Post							
Equal variances assumed	1.141	0.291	0.089	45	0.93	0.085	0.959
Equal variances not assumed			0.096	38.177	0.924	0.085	0.881

Table 5
*Differences Between Secure and Insecure Mothers on their Use of Positive Guidance
Over Time*

	df	F	<i>p</i> -value
Secure vs. Insecure			
Within Subjects			
Time	1	1.19	.28
Time*Twoclass	1	.02	.88
Error	44		
Between Subjects			
Twoclass	1	.01	.92
Error	44		

Table 6

Mean Scores and Independent Sample Test on Use of Positive Guidance for Secure and Insecure Mothers

Variable	Mothers' attachment classification	N	Mean	Std. Deviation	Std. Error Mean
Use of Positive Guidance Pre					
	Insecure	15	4.00	1.27	0.33
	Secure	32	3.95	1.15	0.20
Use of Positive Guidance Post					
	Insecure	16	4.19	1.83	0.46
	Secure	31	4.23	1.32	0.24

Independent Samples Test

Variable	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Use of Positive Guidance Pre							
Equal variances assumed	0	0.999	0.126	45	0.9	0.047	0.371
Equal variances not assumed			0.122	25.107	0.904	0.047	0.385
Use of Positive Guidance Post							
Equal variances assumed	6.446	0.015	-0.082	45	0.935	-0.038	0.465
Equal variances not assumed			-0.074	23.288	0.941	-0.038	0.516

Table 7

*Differences Between Secure and Insecure Mothers on their Empathic Responsiveness
Over Time*

	df	F	<i>p</i> -value
Secure vs. Insecure			
Within Subjects			
Time	1	31.54	.00
Time*Twoclass	1	.90	.35
Error	44		
Between Subjects			
Twoclass	1	.36	.55
Error	44		

Table 8

Mean Scores and Independent Sample Test on Empathy for Secure and Insecure Mothers

Variable	Mothers' attachment classification	N	Mean	Std. Deviation	Std. Error Mean
Use of Empathy Pre					
	Insecure	15	4.33	1.44	0.37
	Secure	32	4.66	1.28	0.23
Use of Empathy Post					
	Insecure	16	5.22	1.84	0.46
	Secure	31	5.52	0.94	0.17

Independent Samples Test

Variable	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Use of Empathy Pre							
Equal variances assumed	0.017	0.897	-0.776	45	0.442	-0.323	0.416
Equal variances not assumed			-0.744	24.814	0.464	-0.323	0.434
Use of Empathy Post							
Equal variances assumed	5.282	0.026	-0.735	45	0.466	-0.297	0.405
Equal variances not assumed			-0.606	19.16	0.552	-0.297	0.491

Table 9
Differences Between Secure and Insecure Mothers on their Level of Permissiveness Over Time

	df	F	<i>p</i> -value
Secure vs. Insecure			
Within Subjects			
Time	1	6.92	.01
Time*Twoclass	1	.37	.55
Error	44		
Between Subjects			
Twoclass	1	.11	.75
Error	44		

Table 10

Mean Scores and Independent Sample Test on Permissiveness for Secure and Insecure Mothers

Variable	Mothers' attachment classification	N	Mean	Std. Deviation	Std. Error Mean
Use of Permissiveness Pre					
	Insecure	15	3.7	1.73	0.45
	Secure	32	3.78	1.33	0.23
Use of Permissiveness Post					
	Insecure	16	3.31	1.77	0.44
	Secure	31	2.87	1.62	0.29

Independent Samples Test

Variable	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Use of Permissiveness Pre							
Equal variances assumed	1.818	0.184	-0.177	45	0.86	-0.081	0.458
Equal variances not assumed			-0.161	22.013	0.874	-0.081	0.504
Use of Permissiveness Post							
Equal variances assumed	0.438	0.511	0.857	45	0.396	0.442	0.515
Equal variances not assumed			0.834	28.198	0.411	0.442	0.53

Table 11
Moderation of Maternal Depressive Symptoms, Treatment Group Placement, and Child Gender on Understanding of Positive Guidance Over Time for Secure and Insecure Mothers

	df	F	p-value
Maternal Depressive symptoms			
Within Subjects			
Time	1	17.09	.00
Time*Twoclass	1	.12	.73
Time*Depressive symptoms	1	.24	.63
Time*Twoclass*Depressive symptoms	1	.36	.55
Error	43		
Between Subjects			
Twoclass	1	.93	.34
Depressive symptoms	1	.22	.64
Twoclass*Depressive symptoms	1	.36	.55
Error	43		
Group placement			
Within Subjects			
Time	1	48.58	.00
Time*Twoclass	1	2.28	.14
Time* Group placement	1	.43	.52
Time*Twoclass* Group placement	1	.86	.36
Error	43		
Between Subjects			
Twoclass	1	1.13	.30
Group placement	1	3.01	.90
Twoclass* Group placement	1	.41	.52
Error	43		
Child gender			
Within Subjects			
Time	1	44.47	.00
Time*Twoclass	1	2.47	.12
Time*Gender	1	.19	.66
Time*Twoclass* Gender	1	.16	.69
Error	43		
Between Subjects			
Twoclass	1	1.05	.31
Gender	1	1.47	.23
Twoclass* Gender	1	.03	.86
Error	43		

Table 12

*Moderation of Maternal Depressive Symptoms, Treatment Group Placement, and Child**Gender on Use of Positive Guidance Over Time for Secure and Insecure Mothers*

	Df	F	<i>p</i> -value
Maternal Depressive symptoms			
Within Subjects			
Time	1	.00	.95
Time*Twoclass	1	.20	.66
Time*Depressive symptoms	1	.50	.48
Time*Twoclass*Depressive symptoms	1	.49	.49
Error	42		
Between Subjects			
Twoclass	1	.11	.74
Depressive symptoms	1	.48	.49
Twoclass*Depressive symptoms	1	.19	.67
Error	42		
Group placement			
Within Subjects			
Time	1	2.31	.14
Time*Twoclass	1	.34	.56
Time* Group placement	1	6.88	.01
Time*Twoclass* Group placement	1	1.96	.17
Error	42		
Between Subjects			
Twoclass	1	.23	.63
Group placement	1	5.65	.02
Twoclass* Group placement	1	1.36	.25
Error	42		
Child gender			
Within Subjects			
Time	1	1.77	.19
Time*Twoclass	1	.20	.66
Time*Gender	1	.60	.44
Time*Twoclass* Gender	1	1.00	.32
Error	42		
Between Subjects			
Twoclass	1	.01	.92
Gender	1	.01	.92
Twoclass* Gender	1	.01	.92
Error	44		

Table 13
Moderation of Maternal Depressive Symptoms, Treatment Group Placement, and Child Gender on Empathic Responsiveness Over Time for Secure and Insecure Mothers

	Df	F	<i>p</i> -value
Maternal Depressive symptoms			
Within Subjects			
Time	1	6.98	.01
Time*Twoclass	1	.41	.53
Time*Depressive symptoms	1	.19	.67
Time*Twoclass*Depressive symptoms	1	.00	.97
Error	42		
Between Subjects			
Twoclass	1	.05	.82
Depressive symptoms	1	.42	.52
Twoclass*Depressive symptoms	1	.06	.81
Error	42		
Group placement			
Within Subjects			
Time	1	32.08	.00
Time*Twoclass	1	1.19	.28
Time* Group placement	1	.49	.49
Time*Twoclass* Group placement	1	1.06	.31
Error	42		
Between Subjects			
Twoclass	1	.11	.74
Group placement	1	2.85	.10
Twoclass* Group placement	1	.51	.48
Error	42		
Child gender			
Within Subjects			
Time	1	26.66	.00
Time*Twoclass	1	.53	.47
Time*Gender	1	.02	.89
Time*Twoclass* Gender	1	.67	.42
Error	42		
Between Subjects			
Twoclass	1	.52	.47
Gender	1	.38	.54
Twoclass* Gender	1	.14	.71
Error	44		

Table 14
Moderation of Maternal Depressive Symptoms, Treatment Group Placement, and Child Gender on Level of Permissiveness Over Time for Secure and Insecure Mothers

	Df	F	<i>p</i> -value
Maternal Depressive symptoms			
Within Subjects			
Time	1	.79	.38
Time*Twoclass	1	1.46	.23
Time*Depressive symptoms	1	.67	.42
Time*Twoclass*Depressive symptoms	1	1.18	.28
Error	42		
Between Subjects			
Twoclass	1	.00	.98
Depressive symptoms	1	.66	.42
Twoclass*Depressive symptoms	1	.15	.70
Error	42		
Group placement			
Within Subjects			
Time	1	9.51	.00
Time*Twoclass	1	.10	.76
Time* Group placement	1	.87	.36
Time*Twoclass* Group placement	1	6.21	.02
Error	42		
Between Subjects			
Twoclass	1	.01	.91
Group placement	1	2.22	.14
Twoclass* Group placement	1	.16	.69
Error	42		
Child gender			
Within Subjects			
Time	1	5.60	.02
Time*Twoclass	1	.45	.51
Time*Gender	1	.22	.65
Time*Twoclass* Gender	1	.03	.87
Error	42		
Between Subjects			
Twoclass	1	.62	.44
Gender	1	3.50	.07
Twoclass* Gender	1	1.05	.31
Error	42		

Table 15
Pairwise Comparison Scores for Moderation of Group Placement on Level of Permissiveness

Mothers' attachment classification	time	(I) Group Placement - Control vs. Treatment	(J) Group Placement - Control vs. Treatment	Mean Difference (I-J)	Std. Error	Sig.a
Insecure	1	Control	Treatment	-0.08	0.76	0.92
		Treatment	Control	0.08	0.76	0.92
	2	Control	Treatment	1.67	0.86	0.06
		Treatment	Control	-1.67	0.86	0.06
Secure	1	Control	Treatment	0.85	0.52	0.11
		Treatment	Control	-0.85	0.52	0.11
	2	Control	Treatment	0.06	0.58	0.93
		Treatment	Control	-0.06	0.58	0.93

Group Placement - Control vs. Treatment	time	(I) Mothers' attachment classification	(J) Mothers' attachment classification	Mean Difference (I-J)	Std. Error	Sig.a
Control	1	Insecure	Secure	-0.5	0.61	0.416
		Secure	Insecure	0.5	0.61	0.416
	2	Insecure	Secure	0.93	0.69	0.18
		Secure	Insecure	-0.93	0.69	0.18
Treatment	1	Insecure	Secure	0.44	0.69	0.53
		Secure	Insecure	-0.44	0.69	0.53
	2	Insecure	Secure	-0.67	0.78	0.39
		Secure	Insecure	0.67	0.78	0.39

Mothers' attachment classification	Group Placement - Control vs. Treatment	(I) time	(J) time	Mean Difference (I-J)	Std. Error	Sig.a
Insecure	Control	1	2	-0.17	0.53	0.76
		2	1	0.17	0.53	0.76
	Treatment	1	2	1.58*	0.65	0.02
		2	1	-1.58*	0.65	0.02
Secure	Control	1	2	1.27*	0.41	0.004
		2	1	-1.27*	0.41	0.004
	Treatment	1	2	0.47	0.40	0.25
		2	1	-0.47	0.40	0.25

Appendix A: Adult Attachment Interview

1. Could you start by helping me get oriented to your early family situation, and where you lived and so on? If you could start out with where you were born, whether you moved around much, and what your family did at various times for a living?

--Did you see much of your grandparents when you were little?

--(if some died before birth)--How old was s/he when s/he died?

--Were there brothers and sisters living in the house, or anybody besides your parents? Are they living nearby now or is your family pretty scattered?

2. I'd like you to describe your relationship with your parents as a young child, if you could start from as far back as you can remember?

--If they discuss only high school ask whether they can remember earlier.

3. Now I'd like to ask you to choose 5 adjectives that reflect your childhood relationship with your mother. I know this may take a bit of time, so go ahead and think for a minute.. then I'd like to ask you why you chose them.

--Okay, now let me go through some more of my questions about your description. You mentioned (you used the phrase) _____. Are there any memories or incidents that come to mind with respect to _____?

4. Now I'd like you to choose 5 adjectives that reflect your childhood relationship with your father. I'm going to ask you again why you chose them.

--Okay, now let me go through some more of my questions about your description. You mentioned (you used the phrase) _____ Are there any memories or incidents that come to mind with respect to _____?

5. To which parent did you feel the closest, and why? Why isn't there this feeling with the other parent?

6. When you were upset as a child, what would you do?

-- When you were upset emotionally when you were little what would you do? Can you illustrate with specific incidents?

-- Can you remember what would happen when you were hurt a bit physically? Again, do any specific incidents come to mind?

-- Were you ever ill when you were little? Do you remember what would happen?

--Do you remember being physically held as a child?

7. What is the first time you remember being separated from your parents? How did you respond? How did they respond? Are there any other separations that stand out in your mind?

8. Did you ever feel rejected as a young child? Of course, looking back on it now, you may realize it was not really rejection, but what I'm trying to ask about here is whether you remember ever having felt rejected in childhood?

--How old were you when you first felt this way, and what did you do?

--Why do you think your parent did those things

--Do you think he/she realized he was rejecting you?

9. Were your parents ever threatening with you in any way, maybe for discipline, or maybe just jokingly?

--Some parents have told us for example that their parents would threaten to leave them or send them away from home. A few of our parents have memories of some kind of abuse. Did anything like this ever happen to you, or in your family?

--How old were you at the time? Did it happen frequently? Do you feel this experience affects you now as an adult? Do you think it will influence your approach to your own child?

10. Were you ever frightened or worried as a child?

11. How do you think these experiences with your parents have affected your adult personality?

--Are there any aspects to your early experiences that you feel were a set-back in your development?

12. Why do you think your parents behaved as they did, during your childhood?

13. Were there any other adults with whom you were close, like parents, as a child?

--Or any other adults who were especially important to you, even though not parental?

--Now I'd like to ask you to choose 3 adjectives that reflect your childhood relationship with (name other adult). Again, I know this may take a bit of time, so go ahead and think for a minute.. then I'd like to ask you why you chose them.

--Okay, now let me go through some more of my questions about your description
You mentioned (you used the phrase) _____. Are there any memories or
incidents that come to mind with respect to _____?

14. Did you experience the loss of a parent or other close loved one while you were a
young
child?

--Can you tell me about what happened and how old you were?

--How did you respond at the time?

--Was this death sudden or expected?

--Can you recall your feelings at that time?

--Were you allowed to attend the funeral, and what was this like for you?

--What would you say was the effect on (parent or household)?

--How did this change over the years?

--Would you say this loss has had an effect on your adult personality?

--How do you think this will affect your approach to your own child?

15. Did you lose any other important persons during your childhood? Go through all
queries
for each loss

16. Have you lost other close persons in adult years? Go through all queries for each
loss

17. Have there been many changes in your relationship with your parents (or remaining
parent) since childhood, I mean from childhood through until the present?

18. What is your relationship with your parents like for you now as an adult?

19. Now I'd like to ask you a different type of question. Let's imagine that the child you
are
expecting is now 1 year old. How do you imagine you will feel when you separate
from
your child?

20. If you had 3 wishes for your child 20 years from now, what would they be? I'm
thinking partly of the kind of future you would like to see for your child. I'll give you
a
minute to think about this one.

21. Is there any particular thing, which you feel you learned above all from your own
childhood experiences?

--What would you hope your child might have learned from his/her experiences of being parented?

Appendix B – Positive Alternatives Measure

ID # _____ Date _____

Positive Alternatives

The purpose of this exercise is to practice using positive language to communicate limits and ideas.

Directions:

Below are 20 examples of inappropriate phraseology for guiding children's behavior. Rephrase each statement using positive, specific language. Avoid using "we" or "let's" or "OK". Each statement needs to communicate what you want the child to do, rather than what you don't want him/her to do.

1. Don't run.
2. Stop throwing your toys.
3. Don't be a baby.
4. Don't hit him.
5. Stop yelling at me.
6. Play nicely.
7. Stop talking with your mouth full.
8. Let's go to the potty, OK?
9. No whining.
10. Don't splash the water out of the tub.
11. Don't be mean.
12. Don't do that.
13. That's not nice.
14. No biting.
15. Let's wash our hands.
16. Be careful with your baby sister.
17. Do you want to help me clean up?
18. Act like a big girl.
19. Don't play with your food.
20. Don't do that, I don't like it.

Appendix C – Use of Positive Guidance Observational Coding Scale

Use of Positive Guidance involves discipline strategies which reinforce appropriate behavior by suggesting positive alternatives to mistaken behavior rather than telling a child what NOT to do. Punitive strategies are never used and adults have appropriate developmental expectations of children. Positive Guidance uses positive statements to bolster children's social and emotional development. This approach fosters a healthy self-esteem, an ability to self-regulate, and well-functioning social skills.

- € Language
 - Avoids let's, we when needing to address the child
 - Avoids negative language (stop, not, don't)
 - Avoids judgmental or vague language (good, bad, nice)
 - Tells the child what s/he CAN do rather than what s/he CANNOT do
 - Sets limit setting or uses direct statements rather than asks questions (OK?)
 - Uses encouragement rather than praise (good job, very good, good boy)
 - Body language: Negative – being physical in a rough or abrupt way;
Positive – gentle physical intervention, smiling
- € Avoids forcing apologies
- € Appropriate discipline – mother avoids insulting/guiling/shaming and other punitive discipline strategies
- € Has appropriate age expectations of the child (ex – expecting child to help with clean up)
- € Child directed versus adult directed play – mother avoids being center of attention
- € Mother scaffolds play – asks questions about the child's activities to stimulate their interest, allows the child to explore
- € Mother anticipates, prevents, or redirects mistaken behaviors
- € Mother avoids laughing at child versus with child
- € Mother is empathetic
- € Mother avoids product or success oriented play – emphasis on right answer
- € Helps child regulates his/her emotions (excitement, sadness, boredom, etc.)
- € Mother stays on the child's level
- € Mother uses honesty rather than misleading the child
- € Mother ensures the safety and protection of the child and the environment
- € Mother listens to the child
- € Mother models appropriate behavior for the child

1 – Minimal use of positive guidance.

- € Mother does not incorporate most major aspects of positive guidance into her interactions with her child. Mother may use peripheral aspects of positive guidance here and there, but she is highly inconsistent in her use and fundamentally misses the meaning of responding to her child with positive guidance techniques. She does not understand positive guidance.

2 – Uses some aspects of positive guidance, but not when it counts.

€ It is clear that the mother relies on strategies other than positive guidance. She may use praise, negative phrasing, ask questions, be more adult centered, etc. While she does use some aspects of positive guidance, it is clear that this is not characteristic of her overall parenting style. Fundamentally, this mother may understand some aspects of positive guidance, but it is clear that she believes in and prefers other methods. She may try positive guidance, but she relies on permissive, harsh, or otherwise non-positive guidance parenting strategies when it counts.

3 – Less use of positive guidance than use of positive guidance.

€ While this mother may clearly use some positive guidance techniques, she has a slight preference in her parenting style for techniques other than positive guidance. She may praise her child, phrase things negatively, ask questions, be more adult centered, etc. These aspects of her parenting seem to slightly overshadow her use of positive guidance – which is clearly there, but is slightly secondary to her preferred techniques. On the fence between positive guidance versus other strategies, this mom is barely on the side of more permissive, harsh, or otherwise non-positive guidance parenting.

4 – Varied use of positive guidance.

€ About half of the mother's discipline strategies are positive guidance, and half of the strategies stray from positive guidance. The mother is varied in her use of positive guidance techniques – while it is clear that she understands a bit of positive guidance, it seems that she randomly uses the techniques or does not use the techniques because she may not fully grasp all of them. The mother seems on the fence as to whether she is capable of using positive guidance or not – she uses some major and some peripheral aspects of positive guidance, yet other times she does not, with no clear preference for either strategy.

5 – More use of positive guidance than not.

€ While this mother uses many major aspects of positive guidance in her interactions with her child, she also uses techniques other than positive guidance. Though she may praise her child, phrase things negatively, ask questions, etc., her parenting strategy overall is slightly more characterized by her positive guidance techniques. While she understands many of the basic tenets of positive guidance, she still relies on other strategies (yet keeps a slight preference for positive guidance). On the fence between positive guidance versus other strategies, this mom just barely made it over to the positive guidance side.

6 – Uses positive guidance when it counts.

€ It is clear that the mother uses a strategy of positive guidance. She incorporates most major aspects of positive guidance into her interactions with her child, though she may use praise or negative phrasing, etc. every now and then. Fundamentally, this mother understands the positive guidance techniques and uses them when it counts, she may just lapse occasionally.

7 – Pervasive use of positive guidance

- € Mother incorporates most major aspects of positive guidance into her interactions with her child. She is highly consistent in her use of positive guidance and fundamentally grasps the meaning of responding to her child with positive guidance techniques. The mother uses appropriate language, scaffolds and lets child direct the play, is in tune with the child's emotional wellbeing, and anticipates and redirects child's mistaken behaviors.

Appendix D – Use of Empathy Observational Coding Scale

Empathy is the capacity to understand what another person is experiencing from within that person's frame of reference, the ability to place oneself in the other's plight. The adult must externalize this feeling and express it in words and acts in a consistent manner to receive a high score. In addition, the scale points are differentiated by quality of empathy rather than quantity of empathy. **Most importantly, we are looking for an empathetic response from the mother when the child is in need (immediate or non-immediate) or distressed.**

- € Showing sensitivity when the child is in distress or in need – vigilant to the child's needs
- € Responding to immediate as well as non-immediate needs (rolling their sleeves up when playing in the water)
- € Helping them when they become irritable if something is not working (getting stuck when going around the corner of the table)
- € Showing them ways for the toys to work when they are confused
- € Responding when they ask for help, while still giving them time to solve the problem
- € Being sensitive to the child's personal space
- € Attuned to child's needs/distress & proactively helps child/asks child about them
- € Timing of helping child when in need or distressed
- € When child is in need or distressed, mom is able to model calm, empathic disposition
- € Celebrating with the child his/her successes or moments when s/he is proud
- € Modeling or role playing empathy for the child
- € Avoids laughing at the child
- € Avoids insulting/guiling/shaming the child
- € Responds with genuine empathy or emotion (rather than like it's a job)

1 – Minimally empathetic.

- € When child is visibly in need or distressed, the mother does not respond. When the child has an immediate need for the mother, mom does not fulfill the bid for help. The mother may respond empathetically at other less crucial times, but not when it counts.

2 – Sometimes empathetic, but not when it counts.

- € When child is in need or distressed, mom mostly does not respond. When it counts, the mother misses most of her child's visible and immediate needs, though she may catch one or two. This mother also misses most of her child's non-immediate needs, though she may catch one or two. Clearly, this mother misses most of the child's bids for help.

3 – Less empathetic than empathetic.

- € When child is in need or distressed, mom responds to less of these needs than she catches. She misses more than ½ of the important, visible needs of the child, but still catches some. The mother is slightly less empathetic than not. She may see an immediate need every now and then, but she misses slightly more than she catches. And she misses many non-immediate needs, though she still responds to some.

4 – Varied empathetic.

- € When child is in need or distressed, the mother responds ½ of the time but misses the bids for help ½ of the time as well. This mother is characterized by a balanced, mixed response in that she is on the fence as to whether she is empathetic or not. Sometimes she catches immediate needs, sometimes she does not. Sometimes she catches non-immediate needs, sometimes she does not.

5 – More empathetic than not empathetic.

- € When child is in need or distressed, mom responds more than not. The mother might be a little slow to pick up on some visible needs, or she may even miss some, however, she is more empathetic than not. This mom may see a non-immediate need every now and then, but she may miss some of the more obscure needs.

6 – Empathetic when it counts.

- € When child is in need or distressed, mom responds. When it counts, the mother responds to her child's visible and immediate needs. This mother may miss one or two needs that are less important or may not pick up on some non-immediate needs through anticipation. However, she clearly responds to the child's needs when they are apparent.

7 – Pervasively empathetic.

- € Mother responds to child's immediate as well as non-immediate needs – not only does she respond to the child when her child is in need or distressed, but she anticipates and addresses the child's non-immediate needs as well.

Appendix E – Use of Permissiveness Observational Coding Scale

Permissiveness is the attitude that grants freedom of expression and activity to another individual, but not necessarily with sanction or approval. The permissive mother does not set limits or clear expectations and allows the child to engage in inappropriate behaviors.

- € Lack or inability to set limits when appropriate
- € Lack or inability to follow through with set limits
- € May allow child to invade mother's personal space
- € Mother may completely ignore child's inappropriate behavior when it should be addressed
- € Mother may let child play/touch the office/research equipment
- € Mother may rationalize or defend inappropriate actions and behaviors
- € Mother may allow child to endanger him/herself, the mother, or the environment

1 – Not Permissive.

Mother sets appropriate limits during the interaction. She follows through on the limits that she sets. In addition, she is very clear about her limits regarding the safety of herself, her child, and the environment.

2 – Minimal permissiveness.

Mother sets appropriate limits when it counts – especially regarding limits about the safety of herself, her child, and the environment. She may or may not set limits at other times, and while she mostly follows through, she may choose not to follow through at times.

3 – Less permissiveness than permissiveness.

Overall, mother is slightly less permissive than not. On the fence of permissiveness, she falls just to the less permissive side. At crucial moments, she sets the limit and tries to follow through, but at other times she does make the choice to let it go unnoticed.

4 – Varied permissive.

Mother sets appropriate limits sometimes, but is unable to set appropriate limits at other times. She follows through sometimes, other times she does not. Her choice of setting a limit or not, following through or not seems somewhat random. While she may set some limits to keep herself, her child, and the environment safe, at other times she may not. It is difficult to say if she is more permissive or less permissive than not.

5 – More permissiveness than not.

Overall, mother is slightly more permissive than not. On the fence of permissiveness, she falls just to the more permissive side. While she may set limits at most of the important times, there may be one or two crucial moments that the mother does not set a limit or

follow through that makes her slightly more permissive. At other less important times, she may choose to set the limit or not, follow through or not.

6 – Predominantly permissive.

Mother may set some appropriate limits, but she is mostly unable to follow through. When it comes to her safety, her child's safety, or the safety of the environment, the mother is unable or does not set limits (when it counts).

7 – Pervasively Permissive.

Mother is unable or simply chooses not to set limits when appropriate. If she does state a limit at all, she is not willing to follow through on the limit. Further, this lack of limit setting is especially apparent in instances regarding the safety of herself, her child, and the environment.

Appendix F: CES-D Scale

Instructions for Questions: Below is a list of the ways you might have felt or behaved recently. Please tell me how often you have felt this way during the past week.

1	2	3	4
RARELY OR NONE OF THE TIME ALL (LESS THAN 1 DAY) THE DAYS)	SOME OR A LITTLE OF THE TIME (1-2 DAYS)	OCCASIONALLY OR A MODERATE AMOUNT OF TIME (3-4 DAYS)	MOST OR OF TIME (5-7

During the past week:

- ___ 1. I was bothered by things that usually don't bother me.
- ___ 2. I did not feel like eating; my appetite was poor.
- ___ 3. I felt that I could not shake off the blues even with help from my family or friends.
- ___ 4. I felt that I was just as good as other people. (R)
- ___ 5. I had trouble keeping my mind on what I was doing.
- ___ 6. I felt depressed.
- ___ 7. I felt that everything I did was an effort.
- ___ 8. I felt hopeful about the future. (R)
- ___ 9. I thought my life had been a failure.
- ___ 10. I felt fearful.
- ___ 11. My sleep was restless.
- ___ 12. I was happy. (R)
- ___ 13. I talked less than usual.
- ___ 14. I felt lonely.
- ___ 15. People were unfriendly.
- ___ 16. I enjoyed life. (R)
- ___ 17. I had crying spells.
- ___ 18. I felt sad.
- ___ 19. I felt that people dislike me.
- ___ 20. I could not get "going".

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